Patterns and Trends of Drug Abuse in Maine: 2013 and Early 2014

Marcella H. Sorg, Ph.D., R.N., D-ABFA1

ABSTRACT

The key finding for Maine for January through April 2014 was the continuing increase in heroin indicators, accompanied by the continuing decline in indicators for pharmaceutical opioid abuse. Of note also were the continuing decline in synthetic cathinone indicators and an increase in methamphetamine abuse, based on law enforcement indicators, during the same time period. This report updates most drug abuse indicators in Maine through calendar year 2013 and early 2014. Since 2011, Maine has experienced a leveling off of pharmaceutical opioid indicators, and heroin has reemerged as a problem, with moderate levels and increasing trends. Heroin deaths in 2010 and 2011 leveled out at 4 percent, but they rose sharply in 2012 and 2013. Heroin arrests by the Maine Drug Enforcement Agency also began to increase in 2011, and during the first quarter of 2014 they constituted 32 percent of all drug arrests, compared with 5 percent in 2010. Primary heroin/morphine treatment admissions have risen from 7 percent in 2010 to 15 percent in 2013. Cocaine/crack abuse indicators are mostly in a multiyear decline at mixed levels. Deaths due to cocaine, which peaked at 19 percent in 2006–2007, have remained at 5–8 percent in the last few years. Drug arrests for cocaine reached a low point at 16 percent during 2012, increased to 19 percent in 2013, but declined to 12 percent in the first quarter of 2014. Most of the decline in arrests is for powder cocaine rather than for crack. Law enforcement cocaine seizure samples found to be adulterated with levamisole dropped from 47 percent in 2011 to 12 percent in 2013, but they rose to 25 percent in the first 4 months of 2014. Marijuana continued at mixed levels and trends. Marijuana drug arrests continued to decline, reaching 5 percent in 2013 and 4 percent in the first quarter of 2014. The percentage of drug-impaired drivers with cannabinoid-positive urine has increased since 2010, reaching 51 percent in 2013 and 58 percent in the first 4 months of 2014. Primary marijuana treatment admissions declined to 8 percent in 2013. Pharmaceutical opioid abuse remained very high with mixed trends. In 2013, pharmaceutical opioids contributed to 60 percent of deaths, 58 percent of impaired driver toxicology tests, 34 percent of primary admissions, 37 percent of drug arrests, and 24 percent of seized and identified forensic laboratory items. The proportion of drug arrests for pharmaceutical narcotics then declined to 26 percent in the first quarter of 2014. The level of primary treatment admissions for other opiates/opioids had continued to increase yearly from 2009 through 2012 but they dropped slightly in 2013. Pharmacy robberies demanding opioids peaked at 56 in 2012, but they declined in number to 12 in 2013. Methamphetamine indicators continued at low levels with mixed trends, but law enforcement indicators showed a continual increase in 2012, 2013, and early 2014, including the proportion and number of drug arrests, number of clandestine laboratory incidents, and number of law enforcement seizures testing as methamphetamine. The number of deaths due to methamphetamine and primary methamphetamine treatment admissions remained stable from 2012 to 2013 at low levels. Synthetic cathinone abuse was at low levels with mixed trends, having declined somewhat in impact since 2011

¹The author is the Director of the Rural Drug and Alcohol Research Program at the Margaret Chase Smith Policy Center, University of Maine.

since 2011 and 2012. Synthetic cathinones were involved in 9 percent of drug arrests in 2013 and 7 percent in the first quarter of 2014. Among drug seizures tested, the number and variety of different compounds decreased from 132 items representing 14 substances in 2012 to 80 items and 7 substances in 2013; only 4 substances were represented in the first 4 months of 2014. Alpha-PVP (alpha-pyrrolidinopentiophenone) was the most frequently found, followed by methylone.

INTRODUCTION

Area Description

According to the 2010 U.S. Census, Maine has 1.3 million inhabitants; this represents a 4-percent increase from the previous decade. It has the highest percentage of rural land area of any State, with more than 60 percent. Maine averages 43 persons per square mile and ranks 40th among States in population density. The majority of its population lives in rural communities. Most (95 percent) of its citizens are White. The population is the oldest of all States, with a median age of 42.7 years. More than 10 percent of Maine residents fall below the Federal poverty line. The majority of Maine's borders are shared with Canada, contributing to an important pattern of cross-border drug trafficking. Maine's long coast and many harbors have also contributed to drug distribution, as has the north-south I-95 corridor, which connects Maine to more southerly urban centers.

Since the late 1990s, Maine has experienced a substantial increase in drug abuse, including accidental drug-induced deaths, which peaked in the early 2000s and again in 2009. Pharmaceuticals have fueled the increase both times; these were largely opioids in mixed drug combinations, including benzodiazepines, antidepressants, muscle relaxants, and alcohol. Beginning in 2012, heroin abuse has reemerged as a major problem.

Data Sources

The data sources used in this report are listed below:

- **Treatment admissions data** were provided by the Maine State Office of Substance Abuse and include all admissions to programs receiving State funding. This report includes 2013 treatment admissions and makes comparisons with prior calendar years. Totals include alcohol admissions (exhibit 1).
- Mortality data were generated by analysis of State of Maine Office of Chief Medical Examiner case files for all drug-induced cases through December 2013. That office investigates all drug-related cases statewide (exhibit 2).
- Drug arrest data were provided by the Maine State Drug Enforcement Agency (MDEA), which
 directs eight multijurisdictional task forces covering the entire State, generating approximately 60
 percent of all Uniform Crime Report (UCR) drug arrests statewide. Data totals include only arrests
 for possession or trafficking, extending through the first quarter of 2014 (exhibit 3).
- Forensic laboratory data on drug seizures were provided by the Maine State Health and Environmental Testing Laboratory, which tests all samples of drugs seized by the MDEA, as well

as by other police and sheriff departments.² Data were provided for 2013 and through April 2014 (exhibit 4).

- Forensic laboratory data on urinalyses of drug-impaired drivers were provided by the Maine State Health and Environmental Testing Laboratory, which tests urine samples of drivers suspected of driving under the influence of drugs. Data were provided for 2013 and for the first 5 months of 2014 (data not shown in exhibits).
- **Pharmacy robbery data** were provided by the Maine Department of Public Safety public information service for the period 2008 through May 2014 (exhibit 5).

DRUG ABUSE PATTERNS AND TRENDS

Heroin

After several years of declining trends, heroin was increasing across all indicators. Following a multiyear decline since a peak in 2005 of 24 percent, the proportion of heroin/morphine deaths hit a 4-percent low in 2010. The proportion of these deaths rose to 18 percent in 2012 and to 19 percent in 2013 (exhibit 2). Beginning in 2008, some heroin/morphine deaths were found to involve pharmaceutical morphine; these have been removed from the totals if identified. In 2013, 41 percent of 34 heroin deaths included pharmaceutical co-intoxicants; 6 of the 34 included cocaine; and 4 included a pharmaceutical opioid.

There has been an overall increase in heroin/morphine-positive urinalyses among drug-impaired drivers, from 8 percent in 2009 to 15 percent in the first 5 months of 2014. The majority of those, 55 percent, were confirmed to be heroin. Most also had one or more other drugs present, including pharmaceutical opioids.

Heroin arrests by the MDEA were stable, at 40–45 per year (approximately 5 to 8 percent of total arrests) from 2007 to 2010 (exhibit 3). However, in 2011, there were 58 heroin arrests, followed by 63 in 2012 and by a substantial increase to 103 in 2013. The projection based on the first quarter of 2014 suggests that number may double. Drug samples seized by law enforcement and identified as heroin rose from 8 percent in 2010, to 23 percent in 2013, and to 34 percent during the first 4 months of 2014 (exhibit 4). In the 65 heroin samples identified in Maine's 2011 law enforcement seizures, 46 percent contained adulterants. In 2012, the number of items increased to 94, and the proportion with adulterants dropped to 6 percent in 2012; it rose to 12 percent in 2013. The most common was caffeine, followed by diltiazem, then levamisole.

The proportion of primary heroin treatment admissions was relatively stable at approximately 7–9 percent from 2006 to 2011. In 2012, however, the proportion increased to 11 percent (exhibit 1), followed by an increase to 15 percent in 2013. Males constituted 54 percent of heroin admissions in 2013, and 24 percent of these clients were age 35 and older, a proportion slightly higher than the 21 percent in 2011. For only those primary heroin admissions who started using within 24 months

²Numbers and proportions of drug items seized and analyzed in Maine forensic laboratories that are included in this report will differ from those shown in the June 2014 CEWG *Highlights and Executive Summary Report*, where numbers and percentages shown in cross-area charts and tables represent reports among seized and analyzed drug items provided by the National Forensic Laboratory Information System.

of treatment, (*N*=211), females age 18–25 constituted the largest age/gender category, at 27 percent, and females age 26–34 were the second largest category, at 21 percent. Of the 2,035 primary heroin treatment admissions in 2013, 46 percent reported they had a secondary or tertiary problem with a pharmaceutical opioid. By contrast, also in 2013, 17 percent of primary opiate admissions had a secondary or tertiary problem with heroin.

Cocaine/Crack

Cocaine/crack abuse indicators were mixed and generally decreasing, with the exception of 2013 primary treatment admissions. Cocaine-induced deaths and positive urinalyses for impaired drivers were low and decreased slightly in 2013 after an increase in 2012. By contrast, arrests increased slightly in 2013, but they declined again in the first quarter of 2014. Impaired driver urinalyses positive for cocaine decreased to only 6 percent in the first 4 months of 2014. The proportion of drug seizures identified as containing cocaine continued a downward trend that began in 2008.

Proportions of primary treatment admissions for cocaine declined from 6–7 percent in 2006–2008 to approximately 3–4 percent in 2010–2012 (exhibit 1). In 2013, the proportion of primary admissions for crack cocaine increased slightly. The relative proportion of arrests for crack also increased in 2013, but first quarter 2014 numbers are lower again; this parallels the numbers of arrests for powder cocaine, which have been falling since 2009.

Deaths in which cocaine was mentioned on the death certificate as a cause or contributor peaked at approximately 19 percent in 2006 and 2007 and then decreased sharply to 5–6 percent in 2009–2010. The proportion rose slightly to 8 percent in 2011 and 2012 and decreased only slightly to 6 percent in 2013 (exhibit 2). Cocaine-heroin combinations constituted 6 of 10 deaths. In contrast, cocaine-pharmaceutical opioid combinations were present in the vast majority, 17 of 23, of positive urine tests for cocaine among drug-impaired drivers, and cocaine-heroin combinations were present in only 2 of the tests positive for cocaine.

Cocaine/crack arrests have constituted a declining proportion of MDEA arrests in recent years. In 2006, there were 235 arrests for cocaine, representing 45 percent of total drug arrests. The number of cocaine arrests declined to 89 (16 percent) in 2012 and rose slightly to 116 (19 percent) during 2013 (exhibit 3). Arrests during the first quarter of 2014 were down again, and the total for 2014 is projected to be still lower at 76 (12 percent). Cocaine/crack trafficking is linked to New York supplies. Most of the decline has been for powder cocaine rather than for crack.

The percentage of drug items seized by law enforcement that tested positive for cocaine continued a multiyear decline from a 2007 peak (50 percent), down to 27 percent in 2012, to 23 percent in 2013, and to 21 percent in the first 4 months of 2014 (exhibit 4). The frequency of levamisole presence, found in 47 percent of 2011 analyzed cocaine samples, dropped to 13 percent in 2012 and to 3 percent 2013; but it increased to 25 percent during the first 4 months of 2014. After these persistent declines, cocaine/crack no longer represents the largest category of drug samples seized and identified in Maine's drug testing laboratory. It is now ranked third, after heroin (at 22 percent) and opiate analgesics (at 20 percent).

Marijuana

Marijuana indicators in Maine have been affected by a medical marijuana law licensing distributers, which was implemented in mid-2010. Both levels and trends for marijuana have been mixed, with an increase in positive urine tests among impaired drivers, a substantial drop in the percentage of marijuana drug arrests, and a slight decrease in law enforcement seizures identified as marijuana and primary marijuana treatment admissions.

MDEA arrests for marijuana declined from a recent peak of 197 (23 percent) in 2010, to 33 (5 percent) in 2013, and still further to a projected 4 percent based on the first quarter of 2014. The proportion of drug items from statewide law enforcement seizures identified as containing marijuana had been stable, at 10 percent, in 2010, 2011, and 2012, but it declined to 4 percent in 2013; it is forecast to rise again in 2014 to about 8 percent, based on the first quarter of 2014 (exhibit 4).

Positive urine tests for marijuana among impaired drivers increased from 21 percent of drivers in 2010 to 36 percent in 2012; they further increased to 51 percent in 2013. These often co-occur with positive opioid and benzodiazepine results in the same drivers.

Proportions of primary treatment admissions for marijuana had stabilized after a multiyear decrease to 9 percent in the 4-year period from 2009 to 2012 (exhibit 1); in 2013 they declined to 8 percent. The age and gender distribution of primary treatment admissions for marijuana also remained fairly stable. In 2012 and 2013, such admissions were 72 percent male; clients younger than 18 accounted for 28 percent in 2012 and 31 percent in 2013.

Pharmaceutical Opiates/Opioids

Pharmaceutical opiate/opioid misuse in Maine remained very high in 2013 and early 2014 indicators, but primary treatment admissions and drug arrests were stable or decreasing for the first time in many years, even as heroin indicators were rising. Death indicators varied depending on the specific opioid involved. During the first quarter of 2014, there was a seizure of acetyl-fentanyl in a counterfeit tablet of Roxicodone-10®, which is the first known instance of acetyl-fentanyl being found in Maine.

After a decade of record numbers of opioid-induced deaths, the number began to decline in 2011 and has hit a plateau. In 2010, there were 124 deaths, which dropped to 105 in 2011 and to 101 in 2012; in 2013, there were 105 such deaths. Methadone and oxycodone remained the most frequent opioids implicated in the deaths. The number of methadone-induced deaths, which peaked at 75 in 2004, gradually decreased to a low of 32 in 2012; they rose slightly to 37 in 2013. The numbers of oxycodone-induced deaths in the last decade, by contrast, were at a low point in 2004 at 15 deaths, just when methadone was at its highest frequency; however, they gradually increased to a high of 50 in 2009. There were 32 oxycodone deaths in 2013 (exhibit 2). It is important to note that most methadone- and oxycodone-induced deaths have other co-intoxicants mentioned on the death certificate, including other opioids and benzodiazepines. These two key drugs frequently co-occur.

Among drug-impaired drivers, the proportion with urinalysis-positive tests for at least one opioid has stayed remarkably stable at approximately 58–60 percent. Frequently, more than one opioid was present, very often in combination with benzodiazepines.

Arrests for pharmaceutical narcotics among drug arrests have declined. There were 327 (38 percent) such MDEA arrests at their peak in 2010 (exhibit 3). That total declined to 236 in 2011, to 222 in 2012, and to 226 in 2013. The projection for 2014, based on the first quarter, is approximately 168 (26 percent of total MDEA arrests).

Drug items seized by law enforcement and identified as containing pharmaceutical narcotics by the State testing laboratory totaled 13 percent in 2009; such items increased to 28 percent in 2011 and represented 26 percent in 2012 and 24 percent in 2013 (exhibit 4). In 2013, 62 percent of the pharmaceutical narcotic items were identified as oxycodone; 19 percent were identified as buprenorphine; and 13 percent were identified as hydrocodone. These proportions were nearly the same over the past several years.

Buprenorphine has emerged as a key drug in other opioid indicators of misuse and abuse. Buprenorphine, generally in combination with other drugs, was involved in five deaths during 2010, three each in 2011 and 2012, and eight in 2013. Buprenorphine was found in 15 percent of drug-impaired driver urinalyses in 2013 and 17 percent during the first 5 months of 2014.

The proportion of primary treatment admissions for pharmaceutical opioids rose every year for more than a decade. They rose to a high of 37 percent in 2012, whereas heroin admissions remained rather stable at approximately 7–9 percent through 2011 and increased to 15 percent in 2013 (exhibit 1). The most common route of administration for pharmaceutical opioids by far was inhalation (44 percent in both 2012 and 2013); injection was reported by 24 percent in 2012 and 22 percent in 2013. The 18–25 year-old cohort for primary admissions for pharmaceutical opioids declined slightly from 26 percent in 2012 to 22 percent in 2013. Primary oxycodone treatment admissions constituted the most frequent single drug of the nonheroin opiate/opioid admissions.

Benzodiazepines

Benzodiazepines continued to play a critical and substantial role as co-intoxicants in Maine drug abuse indicators, with mixed levels and trends across indicators. The proportion of deaths involving benzodiazepines rose to 34 percent in 2010. Although the proportion declined to 25 and 29 percent, respectively, in 2011 and 2012, it rose sharply to 36 percent in 2013 (exhibit 2).

Among drug-impaired drivers, 34 percent had urinalysis-positive tests for one or more benzodiazepines during the first 5 months of 2014; this was a reduction from the high of 46 percent in 2012. That proportion declined to 40 percent during 2013 as well as during the first 4 months of 2014. A total of 29 percent of drug-impaired driver subjects had a combination of pharmaceutical opioids and benzodiazepines present in their urine toxicology, a reduction from 43 percent in 2012.

Numbers of primary benzodiazepine treatment admissions peaked at 121 in 2011, but they declined to 91 in 2012 and stayed at that level in 2013, representing less than 1 percent of all admissions.

Methamphetamine

Methamphetamine indicators were at low levels, but there was an approximately 50-percent increase from 2011 to 2012 in drug arrests and clandestine laboratory incidents; those numbers more than doubled during the first quarter of 2014. Law enforcement seizures identified as methamphetamine

tripled from 2011 to 2012, increased by approximately 17 percent from 2012 to 2013, and increased by 71 percent from 2013 to the first quarter of 2014. The MDEA reported recent a seizure of about 100 methamphetamine pills, which have not been reported in Maine for several years. Among drugimpaired drivers in early 2014, only 1 percent tested positive for methamphetamine, unchanged from 2012 and 2013. The number of primary methamphetamine treatment admissions increased from 33 in 2009 to a plateau in the forties during 2010 through 2013. Methamphetamine was not present in any deaths during 2011 or in the first half of 2012. Methamphetamine-caused deaths cannot be distinguished from those due to pharmaceutical amphetamines; in 2013 seven deaths were caused by "amphetamine," and the same number was found in 2012.

MDMA

Indicators for MDMA (3,4-methylenedioxymethamphetamine) were very small in number, with decreasing trends. There were only five MDMA primary treatment admissions during 2011. There were no deaths due to either MDMA or MDA (3,4-methylenedioxyamphetamine) during 2011, 2012, or 2013. During 2012, there were four arrests by the MDEA for MDMA, and there were five in 2013 (constituting less than 1 percent of drug arrests). Likewise, among drug-impaired drivers, only 1 percent tested positive for MDMA.

Although the numbers were low, law enforcement drug seizures tested in the Maine State laboratory and identified as containing MDMA increased every year from 2007 to 2010, but they have since declined precipitously. In 2012, there were only eight such items, of which five were also positive for MDPV (3,4-methylenedioxypyrovalerone) and two for cocaine. In 2013, there were eight MDMA seizures; in one of those items dimethylsulfone, also known as methylsulfonylmethane or MSM, was also detected.

Synthetic Cathinones

Synthetic cathinones declined in numbers and variety during 2013 and early 2014. They were first reported by Maine law enforcement in 2011, particularly in several mid-State and coastal areas, where they produced a spike in poison control center calls and emergency room visits. In late 2011, a law was passed making eight of these substances illegal in Maine. There was a corresponding increase in drug arrests and law enforcement seizures identified as synthetic cathinones; these seizures increased from 6 percent in 2012 to 9 percent in 2013, and to 7 percent in the first quarter of 2014. During the same period, the number of impaired drivers testing positive for synthetic cathinones declined from 6 percent in 2012 to only 2 percent in 2013 and in the first 4 months of 2014.

From 2012 to 2013, the number of specific chemicals found in law enforcement seizure items identified as synthetic cathinones declined by 50 percent. During 2012, a total of 132 items seized by law enforcement were shown to contain synthetic cathinones (13 percent of items tested). These included 46 percent MDPV; 31 percent alpha-PVP (alpha-pyrrolidinopentiophenone); 5 percent each pentadrone, MDMC (2,3-methylenedioxymethcathinone), and methylone; and 10 other substances with only 1 or 2 items for each. By 2013, the number of synthetic cathinone items identified among seizures declined to 80, and the chemical distribution had changed to 57 percent alpha-PVP; 15 percent MDMC; 11 percent methylone; and 5 percent or less for MDPV, 4-MEC, 4-FMC, and MPHP. Synthetic cathinones activity within Maine is focused in the same general areas where methamphetamine trafficking and clandestine laboratories are more frequent.

In 2012, the Office of Chief Medical Examiner reported two deaths in which alpha-PVP was listed as a cause or contributing factor. In 2013, there were three deaths in which synthetic cathinones played a role, one each for alpha-PVP, methylone, and MDPV.

Piperazines

Piperazines have appeared among items seized by Maine's law enforcement and analyzed by the Maine State laboratory in the last 4 years, but numbers have been declining. During 2010, 15 items seized by law enforcement were identified in the Maine State laboratory as containing BZP (1-benzylpiperazine). All of these were in tablet form, and most also contained other substances, such as TFMPP (1-[3-trifluoromethylphenyl]piperazine). During 2011, 10 items tested in the Maine forensic laboratory contained BZP; 8 had only BZP with TFMPP combined, and 2 were combined with TFMPP and MDMA. During 2012, by contrast, there were no analyzed samples that were identified as containing any piperazines. In 2013, three items were identified as containing BZP. Two were tablets containing BZP and caffeine, and one also had 3-chorophenyl piperazine; one item contained BZP and TFMPP. None have been identified in the first quarter of 2014.

Tryptamines

In 2010, four items tested in the Maine forensic laboratory contained DMT (dimethyltryptamine), associated with a small DMT laboratory that was discovered by law enforcement. There were no seizures containing DMT in 2011, but there were six in 2012 and three in 2013. The MDEA confirmed two clandestine DMT laboratories, one each in 2010 and 2011. In 2013, there were two items that were identified as containing 5-MEO-DIPT ("Foxy methoxy").

Other Substances

Among 2013 seizure items tested by the Maine State laboratory, five were found to contain the phenethylamine 251-NBOMe, and two tested as phenethylamine. In terms of synthetic cannabinoids, one item contained AM-2201, and eight items contained XLR-11. Ten items contained the hallucinogen LSD (lysergic acid diethylamide), and six contained psilocin. During the first 4 months of 2014, none of the above substances had been identified.

ACKNOWLEDGMENTS

The author acknowledges the contribution of the following individuals and organizations that provided data and information for this report: Anne Rogers and Stacie Chandler of the Maine Office of Substance Abuse; Margaret Greenwald, Maine Chief Medical Examiner; Christopher Montagna and Steve Pierce, Maine Health and Environmental Testing Laboratory; and Roy McKinney, MDEA. Funding from the U.S. Attorney's Office for the District of Maine provided support for the earlier years' analysis of drug death data, and funding from the Maine Department of Attorney General provided support for drug death data after 2009.

For inquiries concerning this report, contact Marcella H. Sorg, Ph.D., R.N., D-ABFA, Director, Rural Drug and Alcohol Research Program, Margaret Chase Smith Policy Center, University of Maine, Building 4, 5784 York Complex, Orono, ME 04469, Phone: 207–581–2596, Fax: 207–581–1266, E-mail: Marcella.sorg@umit.maine.edu.

Exhibit 1. Frequency and Percentage of Annual Treatment Admissions by Primary Substance of Abuse, Maine: 2006–2013

Primary Drug	2006	2007	2008	2009	2010	2011	2012	2013
	Freq.							
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Cocaine	764	902	768	575	454	456	429	443
	(7.0)	(7.3)	(6.0)	(4.0)	(3.3)	(3.6)	(3.3)	(3.3)
Heroin/Morphine	1,007	991	1,092	1,250	928	1,058	1,386	2,035
	(9.2)	(8.0)	(8.5)	(8.6)	(6.8)	(8.5)	(10.8)	(15.3)
Other Opiates and Opioids	2,282	3,142	3,951	4,185	4,372	4,409	4,698	4,509
	(20.9)	(25.3)	(30.7)	(28.9)	(32.2)	(35.2)	(36.5)	(33.9)
Marijuana	1,169	1,349	1,304	1,303	1,275	1,179	1,113	1,071
	(10.7)	(10.9)	(10.1)	(9.0)	(9.4)	(9.4)	(8.6)	(8.1)
Methamphetamine	49	34	31	33	41	44	46	43
	(0.4)	(0.3)	(0.2)	(0.2)	(0.3)	(0.4)	(0.4)	(0.3)
Alcohol	5,519	5,800	5,531	6,481	5,904	4,726	4,473	4,453
	(50.6)	(46.8)	(43.0)	(44.7)	(43.5)	(37.8)	(34.8)	(33.5)
Other Drugs	122	602	172	671	602	637	723	669
	(1.1)	(4.9)	(1.3)	(4.6)	(4.4)	(5.1)	(5.6)	(5.0)
Total Number With Alcohol	10,912	12,395	12,849	14,498	13,576	12,510	12,868	13,290

SOURCE: Maine Office of Substance Abuse Treatment Data System

Exhibit 2. Frequency and Percentage of Key Drugs and/or Categories Mentioned on the Death Certificate as a Cause of Death, Maine: 2006–2013

Key Drug	2006	2007	2008	2009	2010	2011	2012	2013
	Freq.							
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Cocaine	32	30	12	9	10	13	13	10
	(19.2)	(19.5)	(7.3)	(5.0)	(6.0)	(8.4)	(8.0)	(5.7)
Heroin/	32	25	18	13	7	7	29	34
Morphine ²	(19.2)	(16.2)	(11.0)	(7.3)	(4.2)	(4.5)	(17.8)	(19.3)
Pharmaceutical Morphine	_	_	2	18	16	13	8	14
	_	_	(1.2)	(10.1)	(9.6)	(8.4)	(4.9)	(8.0)
Oxycodone	24	38	27	50	48	34	42	32
	(14.4)	(24.7)	(16.5)	(27.9)	(28.7)	(21.9)	(25.8)	(18.2)
Methadone	68	59	56	48	50	41	31	37
	(40.7)	(38.3)	(34.1)	(26.8)	(29.9)	(26.5)	(19.0)	(21.0)
Benzodiazepines	36	36	39	56	57	39	47	63
	(21.6)	(23.4)	(23.8)	(31.3)	(34.1)	(25.2)	(28.8)	(35.8)
Antidepressants	19	27	44	61	58	28	32	33
	(11.4)	(17.5)	(26.8)	(34.1)	(34.7)	(18.1)	(19.6)	(18.7)
Illicit Drugs	59	49	30	22	17	17	41	47
	(35.3)	(31.8)	(18.3)	(12.3)	(10.2)	(11.0)	(25.2)	(26.7)
Pharmaceuticals	134	136	155	164	160	140	141	144
	(80.2)	(88.3)	(94.5)	(91.6)	(95.8)	(90.3)	(86.5)	(81.8)
Total Number of Drug Deaths	167	154	164	179	167	155	163	176

¹Note that drug categories are not mutually exclusive and do not add to 100 percent. Drugs may be implicated as a cause of death either alone or in combination with other drugs or alcohol. All drug categories are not included.

SOURCE: Maine Office of Chief Medical Examiner

²Beginning in 2008, pharmaceutical morphine is reported separately, if known, and subtracted from the heroin/morphine total. However, in some deaths, it is not possible to differentiate pharmaceutical morphine from heroin.

Exhibit 3. Frequency and Percentage of Key Drug Arrest Categories, Maine: 2006–March 2014

Key Drug	2006	2007	2008	2009	2010	2011	2012	2013	2014 est ²
	Freq.								
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Cocaine/Crack	235	252	230	203	189	172	89	116	76
	(45.1)	(46.5)	(36.3)	(26.2)	(22.0)	(28.4)	(15.9)	(19.0)	(11.7)
Heroin	18	43	40	45	40	58	63	103	208
	(3.5)	(7.9)	(6.3)	(5.8)	(4.7)	(9.6)	(11.2)	(17.0)	(31.9)
Methamphet-	30	17	8	25	30	23	32	51	120
amine	(5.8)	(3.1)	(1.3)	(3.2)	(3.5)	(3.8)	(5.7)	(8.0)	(18.4)
Marijuana	103	94	108	160	197	69	96	33	24
	(19.8)	(17.3)	(17.1)	(20.6)	(22.9)	(11.4)	(17.1)	(5.0)	(3.7)
Pharmaceutical Narcotics	123	114	213	305	327	236	222	226	168
	(23.6)	(21.0)	(33.6)	(39.3)	(38.1)	(39.0)	(39.5)	(37.5)	(25.8)
Benzodiazepines	3	14	9	17	16	17	8	33	12
	(0.4)	(2.6)	(1.4)	(2.2)	(1.9)	(2.8)	(1.4)	(3.0)	(1.8)
Total Number of Arrests	521	542	633	776	859	605	562	603	652

¹Categories do not sum to 100 percent because all categories are not included in the table.

SOURCE: Maine Drug Enforcement Agency

Exhibit 4. Percentage of Drug Items Seized by Law Enforcement in Key Drug Categories Identified by the State Health and Environmental Laboratory, Maine: January 2006–May 2014

Key Drug Category	2006	2007	2008	2009	2010	2011	2012	2013	2014¹
Cocaine	43.3	50.1	44.1	43.4	41.1	29.0	27.6	22.7	19.9
Opiate Analgesic	18.3	14.8	12.2	13.3	17.7	27.9	25.7	23.6	22.2
Heroin	10.2	7.2	8.5	14.7	8.3	9.9	9.1	23.2	33.8
Marijuana	11.3	11.1	7.6	7.1	9.5	10.4	9.3	3.9	4.3
Benzodiazepine	4.9	3.0	3.7	1.6	2.7	3.5	2.9	2.9	2.3

¹Data for 2014 are for January through May.

SOURCE: Maine State Health and Environmental Testing Laboratory

²Estimated 2014 totals were obtained by projecting the first 3 months to 12 months.